

CHAPTER 1. INTRODUCTION

1.1 Research Background

China's economy has grown rapidly since it implemented reforms to open up the country to trade with the rest of the world. The growth of its gross domestic product (GDP) has increased on average by more than 9% each year. In addition, the role that China has been playing in the global economic system has attracted worldwide attention. The importance of the Chinese economy can be expressed in terms of China's share of global GDP rising from just 5% to nearly 16%. However, how China can record such a surprising growth rate and the environment needed to achieve this performance are key issues that have attracted the attention of many economists. Many related studies indicate that the fiscal decentralization implemented by China has been an important factor that has helped stimulate this growth.

China implemented its Fiscal Reform referred to as the "Tax Sharing System (TSS)" beginning in 1994.¹ The TSS asserted that the income item that was relatively easy to identify belonged to either the central or provincial governments. In fact, the system of fiscal decentralization was based on the jurisdiction that gave the corresponding government the right to tax. The major goals of the TSS implemented in 1994 were to construct a new fiscal system between the central and provincial governments by demarcating the different tax categories.² The result was that both the share of government revenues in GDP and the share of the central government revenue in the total budgetary revenue were increased.

¹ In the course of the fiscal decentralization that took place in China, the fiscal system mainly went through the fiscal reforms that occurred on four occasions in 1980, 1985, 1988 and 1994.

² As proclaimed by Qiao, Martinez-Vazquez, and Xu (2002), the key measures in the TSS included the introduction of a value added tax (VAT) as the major revenue source and the set up of uniform tax-sharing rates for major taxes including VAT. The uniform tax-sharing rates replaced the previous fixed-amount remittance scheme adopted in the Fiscal Responsibility System (FRS).

According to Figure 1, the fiscal structures of the central and provincial governments have undergone tremendous change since 1994. In the year prior to the implementation of the Fiscal Reform in 1994, the shares of total fiscal revenue accounted for by the central and provincial governments were 22% and 78%, respectively. However, when the fiscal decentralization was implemented in 1994, these proportions became 55.7% and 44.3%, respectively, and the share accounted for by the central government greatly increased by 33.7%. Following this reform in 1994, the proportion of the total national fiscal revenue accounted for by the central fiscal revenue rose rapidly, while the proportion of the total national fiscal revenue accounted for by the provincial fiscal revenue decreased by a large margin.

In view of these changes in the fiscal revenues, the centralization of fiscal power at the provincial government level will most likely cause the provincial government to

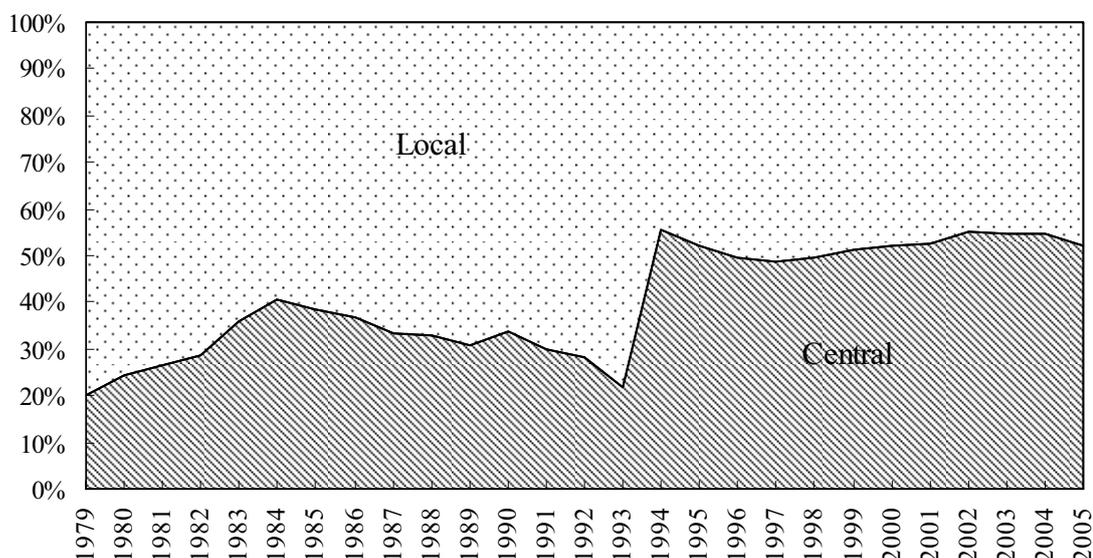


Figure 1: Share of Central and Local Fiscal Revenue

Year

Source: *China Statistical Yearbook* (State Statistical Bureau, SSB).

Note: The central and local revenue in this table represent the income from the central and local level governments themselves.

suffer an insufficiency of tax revenue or a fiscal deficit.³ This does not imply that the degree of fiscal decentralization is decreasing because the degree of fiscal decentralization is expressed in terms of fiscal revenue autonomy. In addition to observing the decrease in the degree of fiscal decentralization, this study divides China into eastern, middle and western areas to look at the differences in each area's per capita fiscal revenue that the local government can use autonomously.⁴ According to Figure 2, it is shown that the eastern area always has a higher per capita fiscal revenue than the other two areas, and this difference has grown continuously over time. Moreover, the per capita fiscal revenue of all three areas has exhibited an upward trend.

Scholars studying the fiscal system mostly focus on and probe into the differences in fiscal revenue for each area as well as the transfer payment system in terms of the intergovernmental relationship. The differences in regional fiscal revenue can be solved temporarily by the central government's transfer system. However, as indicated by Ma (1997), the current transfer payment system in China has two big defects in terms of its structure. First, the main effect of transfer payment equalization is not overcoming the uneven situation in terms of the fiscal revenue between provinces.

³ In China's fiscal system, the provincial government must pay some of its fiscal revenues to the central government. When calculating the fiscal independence of each province, such payments should be deducted from the provincial total fiscal revenues for the remainder which is actually the amount that the provincial government can use freely. As the provincial government can keep more of these provincial fiscal revenues for its own use, there is a higher degree of fiscal decentralization at the provincial level (Huang and Cheng, 2005).

⁴ Based on the standards of the State Statistical Bureau (SSB) of China, the study divides the whole country into three areas in terms of its economic development and geographical features. The eastern area includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Guangdong, Shandong, Guangxi and Hainan. The middle area includes Heilongjiang, Shanxi, Inner Mongolia, Jilin, Anhui, Jiangxi, Hubei, Hunan and Henan. The other provinces belong to the western area.

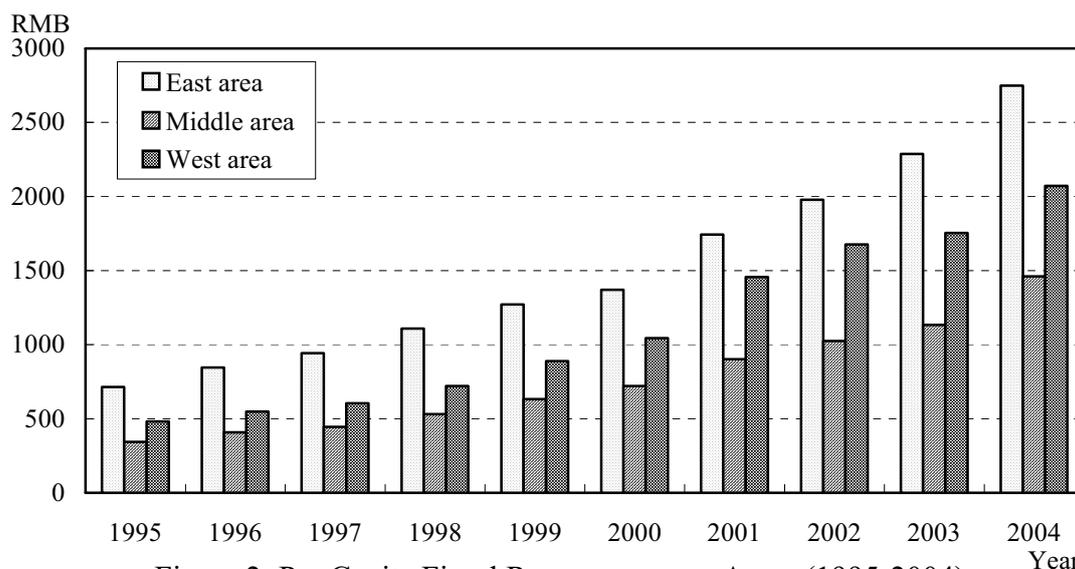


Figure 2: Per Capita Fiscal Revenue among Areas (1995-2004)

Source: *Finance Yearbook of China* (various years).

On the contrary, it enhances the interests of the rich. Second, the allocation of the intergovernmental transfer payment system lacks a clear criterion. In other words, the fiscal capacity of the provincial government lacks a scientific estimation method and recently provincial governments have had more incentives to bargain with the central government to transfer more payments to themselves.⁵

Since China implemented its Fiscal Reform in 1994, each provincial government has had a greater responsibility for its fiscal balance. The fiscal revenues of each province have relied more intensely on its tax revenues. Thus each province has stepped up its tax effort to increase its tax revenues. Therefore, how to strengthen and obtain more tax revenues is an issue that all local governments need to closely monitor. Since each province's tax revenue greatly depends on its tax efforts,⁶ the

⁵ If the Chinese authorities do not face and solve this problem early, this will lead to the fiscal effort and fiscal capacity being wrongly estimated, which will mean that most transfer payments are made in rich areas at the expense of the poor areas. Consequently, the miscalculations will result in contradictions and conflicts between the central and provincial government levels, an outcome that is not desired by the Chinese authorities.

⁶ The difference in the fiscal revenue for different areas is affected in many ways. The primary factors that affect the fiscal revenue of the local government may be divided into two dimensions, namely, the supply and demand dimensions of fiscal revenues. The former contains the level of economic development, and the latter contains the efficiency of the provincial government or the degree of tax effort, etc.

issue of the determinants of the tax efforts of local governments is worth studying. It is obvious that a higher degree of fiscal decentralization indicates that a greater proportion of fiscal revenues is used independently of total fiscal revenue. Therefore, a higher degree of fiscal decentralization provides local governments with an incentive to have a higher degree of tax effort. The issue of the influence of fiscal decentralization on the tax effort is thus well worth studying.

1.2 Research Purpose

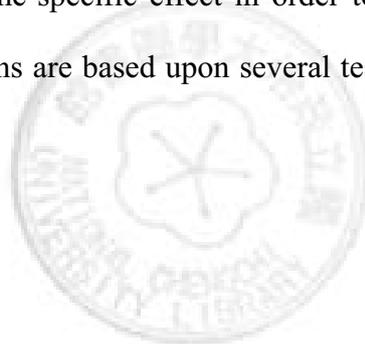
Under the aforementioned backgrounds, how to strengthen and obtain more tax revenues is an issue in which all local governments need to keep a close eye on. Moreover, there are many factors which would influence the tax effort. For example, the economic development and the institution factors are commonly considered as crucial variables. The institution factor is considered as the most important variable in recent studies (Abdul and Baig, 2005; Bird, Martinez-Vazquez and Torgler, 2004). In addition, a higher decentralized government has more responsibility to increase its willingness to achieve higher levels of tax effort (Oates, 1972). However, there is a rare study to analyze how the fiscal decentralization influences tax efforts.⁷ Most of the previous studies focus on the measure of tax effort or analyze the issue on the national position.

Therefore, the purpose of this study is to construct an empirical model (two-way fixed effect model) in order to understand whether fiscal decentralization could influence the efforts of tax collection in the provincial government. The study compresses the tax effort of provinces and investigates what factors would influence the tax effort from economic and institutional angles. Finally, the study attempts to

⁷ Only Bird, Martinez-Vazquez and Torgler (2004) analyzed the impact of fiscal decentralization to tax effort, but the influence is not statistically significant.

obtain a conclusion and a rule with which the China authority will follow.

Under the above-mentioned situation, China's fiscal system has experienced fiscal reform since 1994. The reform changes the allocation of the tax revenue between the central and the provincial government. Hence, this study adopts the official panel data for 31 provinces/cities during the 1996-2004 period. It uses the panel data from the China Statistical Yearbook, the Finance Yearbook of China, the Sichuan Statistical Yearbook, the Tibet Statistical Yearbook and the Chongqing Statistical Yearbook to analyze this issue. This study expects to completely understand how fiscal decentralization influences the tax effort. Moreover, this study adds the regional-specific effect in order to observe the provincial characteristics. In addition, this study considers the time-specific effect in order to understand the change each year. Finally, the conclusions are based upon several tests for econometric issues and thus they are reliable.



1.3 Expected Research Results and Research Framework

1.3.1 Expected Research Results

According to the purpose of this research, this study hopes to accomplish the following results:

(1) This study will completely generalize the fiscal decentralization theory, the measures of fiscal capacity and the factors which would influence tax efforts.

(2) This study attempts to establish a structure including theory as well as an empirical model. In addition, this study uses data to compute tax capacity and tax effort of each province/city. Based on the conclusions, this study attempts to understand the situation of the tax capacity and the tax effort in China.

(3) Because this study uses four different measures to represent the tax effort, this study attempts to find an identical result under those different models. And according to those results, this study intends to observe whether the degree of fiscal decentralization influences the tax effort. Moreover, this study attempts to deeply comprehend the factors which influence the tax effort.

(4) In the empirical model, this study will adopt a two-way fixed effect model to capture the regional-specific and time-specific effects. Thus, this study adds the regional-specific effect in order to observe the provincial characteristics. In addition, this study considers the time-specific effect in order to understand the change each year.

(5) Finally, this study adopts various statistical tests to check the accuracy. And those tests will offer strong evidence for the conclusion.

The conclusion is not only an international academic discussion and practical

application, but also offers Taiwanese businessmen key information for investments in China. The Taiwanese businessmen can take into consideration the conclusions of this study to choose their investment locations in China. Moreover, the main work of previous empirical studies usually only uses four measures to observe the tax effort or to adopt one measure to regress, but the contribution of this study is not only to adopt four measures but also to regress with those indices.

1.3.2 Research Framework

The primary issue of this study is how the degree of fiscal decentralization affects the local government's tax effort in China after the Fiscal Reform was implemented in 1994. This study calculates the tax effort of 31 provinces from 1996-2004 and constructs four specifications of the two-way fixed effects model in order to examine the role of fiscal decentralization playing in the local government's tax effort in China.

The main purpose of this study is to understand the comprehensive impact of fiscal decentralization on the tax effort. Hence, after discussing the research background, purpose and structure, this study generalizes the fiscal decentralization theory and the determinants of tax effort. In addition, this study will compress those literature and introduce a situation of tax effort and tax capacity. Moreover, this study will interpret the relationship between tax effort and fiscal decentralization in China.

Subsequently, this study collects research data and constructs an empirical model in terms of previous literature. This study uses a regressive method and attempt to explain the estimate result in order to understand the role of fiscal decentralization playing in the tax effort. Furthermore, this study uses the regional- and time- specific effect to observe whether the tax effort is influenced by time and regional

characteristics. Meanwhile, the conclusion will be tested by several statistical methods.

Finally, this study uses the conclusion to provide several policy implications. Hence, this offers Taiwanese businessman a guide to better evaluate their strategies. And the China authority could draw up policies in terms of the conclusions. The research steps are illustrated in Figure 3.



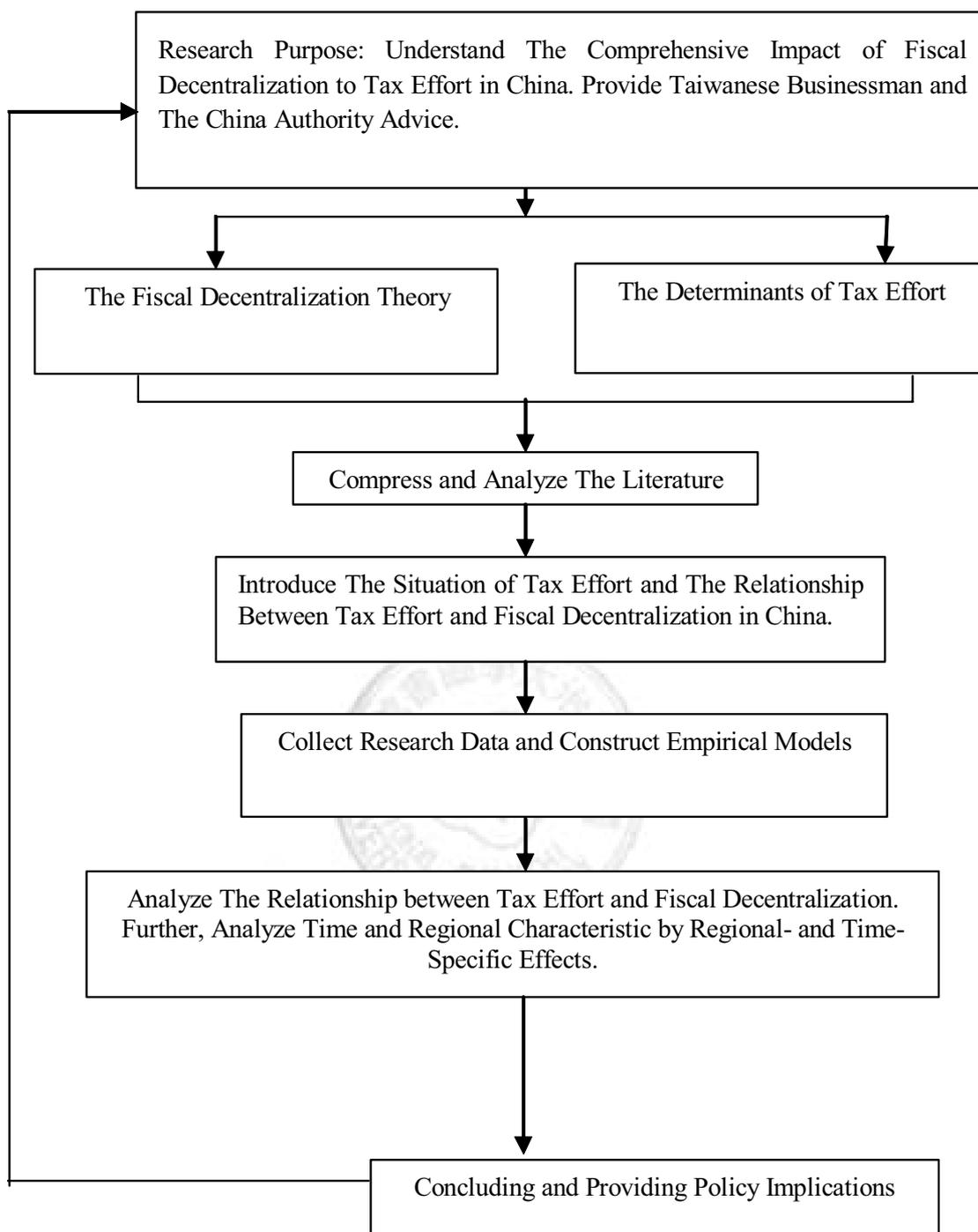


Figure 3: Research Framework